

Abstract

5 The invention relates to a method for
equalizing a received signal in a digital receiver with
the aid of a DFB [sic] (Decision Feedback Equalizer)
structure. The received signal is based on a signal
constellation (for example BPSK, GMSK, QPSK) which is
one-dimensional or can be transformed to be one-
dimensional. The coefficients of the DFE are fixed so
10 as to minimize the expected value of the squared real
part of the error in the received signal. In contrast
with the prior art, the error, which is a complex value
per se, is not used as a basis for optimization.
However, calculation is limited to the real value.
15 Instead of being complex, the filter coefficients can
also be real. The essential point is that the
performance of the DFE structure can be improved in
this basically simple way, it even being possible to
reduce the computational outlay by comparison with the
20 prior art.

(Figure 4c)

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